



AT A GLANCE

Improving Oral Health: Preventing Unnecessary Disease Among All Americans 2001



"Safe and effective measures exist for preventing oral disease, but they are underused."

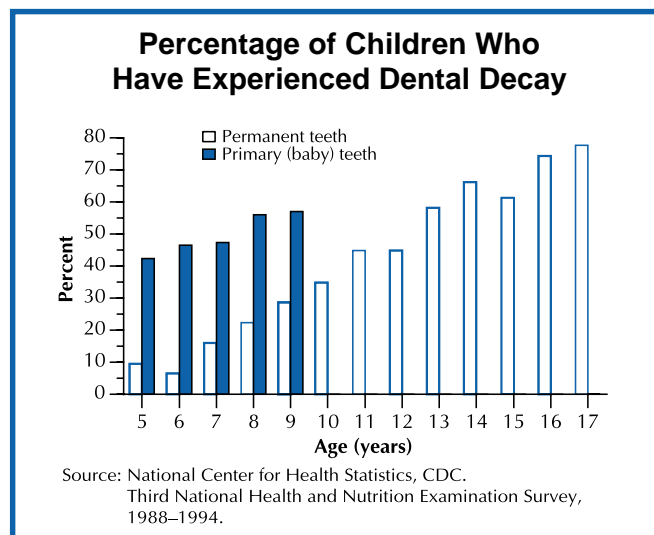
*David Satcher, MD, PhD
Surgeon General*

Oral Health: An Important Health Issue

About 500 million dental visits occur annually in the United States. In 2000, an estimated \$64 billion will be spent on dental services. Many U.S. children and adults, however, still do not have access to effective measures to prevent oral diseases and conditions. For example, dental caries (decay) remains one of the most common infectious diseases among U.S. children. This preventable health problem begins early: 17% of children aged 2–4 years have already had caries. Dental decay affects 52% of 8-year-old children and 78% of 17-year-olds. Among low-income children, almost 50% of tooth decay remains untreated and can cause pain, dysfunction, underweight, and poor appearance—problems that greatly reduce a child's capacity to succeed.

Serious oral health problems also occur among adults. Each year, about 30,000 Americans are diagnosed with oral and pharyngeal (throat) cancers, and more than 8,000 people die of these diseases. In addition, almost 30% of elderly adults no longer have their natural teeth because of tooth decay and gum disease.

Proven preventive measures, such as water fluoridation, dental sealants, and smoking prevention and cessation programs, can markedly reduce oral and dental diseases, yet they are often unavailable to those who need them most.



CDC's National Leadership to Improve Oral Health

The publication of *Oral Health in America: A Report of the Surgeon General* in May 2000 highlighted the relationship between oral health and overall good health through the lifespan and catalyzed new public-private partnerships to improve the oral health of those who still suffer disproportionately from oral diseases.

The Centers for Disease Control and Prevention (CDC) is the federal agency with primary responsibility for supporting state- and community-based programs to prevent oral disease, promoting oral health nationwide, and fostering applied research to enhance oral disease prevention in community settings. With fiscal year 2001 oral health funding of \$8.5 million,* CDC is working with various partners to extend proven preventive measures for oral diseases and conditions; to promote oral health in communities, schools, and health care settings; and to evaluate the cost-effectiveness of selected preventive strategies.

Encouraging Effective Use of Fluoride

Over the past 50 years, the damage caused by dental decay has been drastically reduced, primarily through the use of fluoride. The least expensive way to deliver

the benefits of fluoride to all residents of a community is water fluoridation—that is, by adjusting the fluoride in the public water supply to the optimal level. Even though the per capita cost of water fluoridation over an entire lifetime can be less than the cost of one dental filling, more than 100 million Americans (38% of those on public water systems) do not have access to water that contains enough fluoride to protect their teeth.

To address this need, CDC has provided national leadership in assessing the appropriate use of various forms of fluoride, in improving the quality of community water fluoridation, and in extending this preventive measure to new communities. Current CDC activities include

- Providing grants to 10 states and one American Indian tribe for assisting with community water fluoridation systems.
- Designing and implementing a national Web-based data management system to help states monitor the quality of fluoridation in their community water systems.
- Disseminating recommendations for appropriate population-based strategies for the use of fluorides.

*This funding includes salaries and expenses as appropriated in the congressional conference report no. 106-1033.

- Examining the role of water fluoridation in ensuring appropriate fluoride exposure.
- Collaborating with other federal agencies to implement the Public Health Service's National Fluoride Plan to Promote Oral Health.

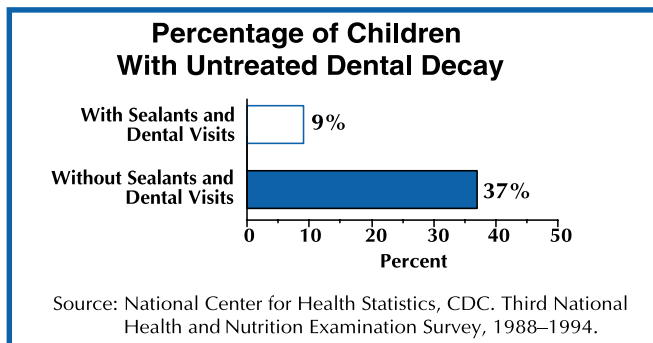
Promoting the Use of Dental Sealants

A national study found that children with dental sealants had significantly less untreated dental decay than children without sealants. *Healthy People 2010* calls for 50% of children to have these protective barriers against dental decay. However, less than 25% of U.S. children have received them. CDC promotes the use of dental sealants through support and technical assistance to states and linkages with its federal partners.

Targeting Oral and Pharyngeal Cancers

Only about half of people with diagnosed oral or pharyngeal cancer survive more than 5 years; among African American men, only about a third survive. People who do survive are at increased risk of developing additional cancers and frequently have the physical and psychological scars of this disfiguring cancer.

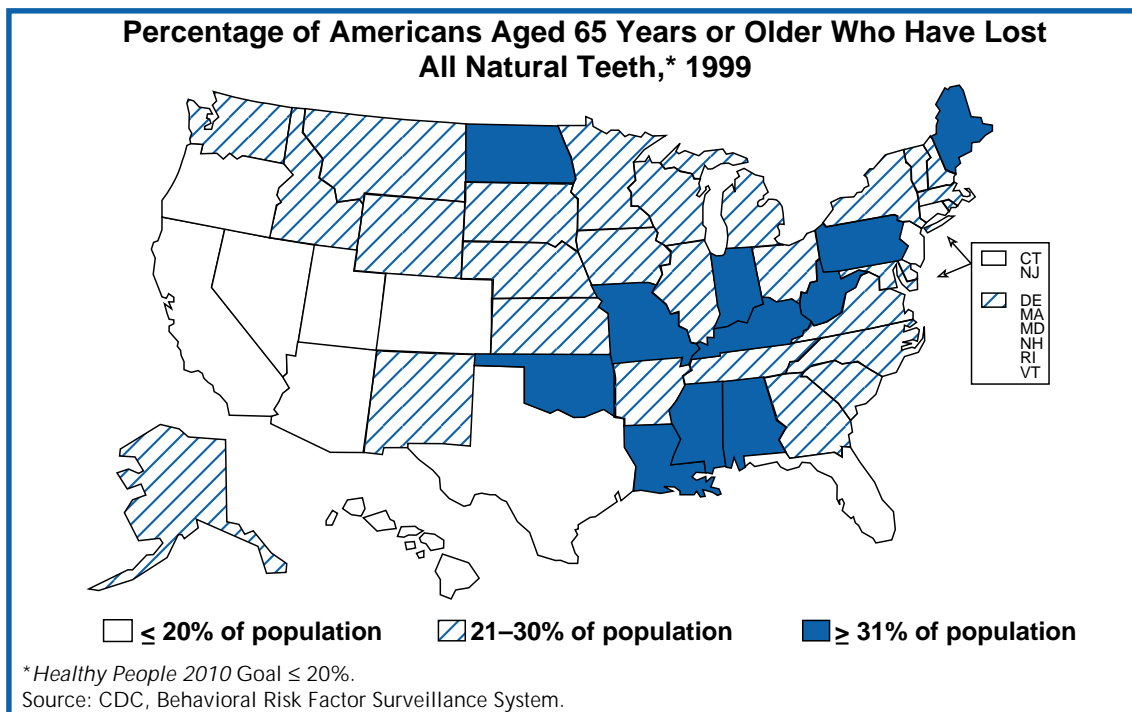
CDC is working with a consortium of public- and private-sector organizations to develop a national program to prevent oral and pharyngeal cancers and to promote early detection and treatment, which can



improve long-term survival. Because tobacco use—especially when combined with heavy alcohol use—is the major risk factor for more than 75% of oral and pharyngeal cancers, CDC is also working with its partners to promote cessation of tobacco use.

Guiding Infection Control in Dentistry

Infection control in the dental care environment remains essential to ensuring the public's safety and retaining its confidence. In the 13 years since CDC published its first guidelines for infection control in dentistry, infection control practices have dramatically improved. Nevertheless, the potential for disease transmission during visits to the dentist continues to arouse intense public interest and media scrutiny. To minimize this potential, CDC assesses the risks of infectious disease transmission, updates guidelines to minimize those risks, investigates disease outbreaks and environmental hazards in the dental setting, and identifies emerging problems.



Strengthening State Capacity to Improve Oral Health

Reaching Vulnerable Populations in the States

One proven strategy for reaching children at high risk for dental disease is through school-based programs supporting linkages with health care professionals and other dental partners in the community. With fiscal year 2001 funding, CDC supports education agencies in four states (Maine, Rhode Island, South Carolina, and Wisconsin) to develop and implement models for improving access to oral health education, prevention, and treatment services for school-aged children who are at high risk for oral disease. CDC will evaluate the applicability of these models in other states.

CDC is working with the Association of State and Territorial Dental Directors to enhance the resources and expertise needed at the state and local levels to assess oral health needs and implement preventive programs.

Providing Fluoridation Training for Professionals

To help preventive services keep pace with the oral health needs of all Americans, CDC develops and provides critical training for partners in oral health, including state dental directors, state drinking water engineers, and state and other oral health personnel.

Supporting a National Oral Health Research Network

In response to the challenge posed by oral disease problems, CDC has joined forces with dental schools, professional organizations, schools of public health, and the National Institute of Dental and Craniofacial Research to apply public health tools to improve oral health outcomes. As part of this effort, CDC has supported the formation of an oral health research

network within CDC's university-based Prevention Research Centers. With fiscal year 2000 funds, CDC has supported nine projects to improve public health practice related to oral health at the community level. These special projects are under way at the following Prevention Research Centers:

- University of Alabama at Birmingham
- University of California, Berkeley
- Yale University
- University of Michigan
- Columbia University
- University of North Carolina at Chapel Hill
- University of Texas-Houston

Improving Data on Oral Diseases

To address the need for ongoing surveillance of oral diseases and conditions, CDC is helping state and local health departments collect, analyze, and disseminate data specific to their areas and to implement new approaches to oral disease surveillance. The National Oral Health Surveillance System, a Web system available at www.cdc.gov/nohss, links oral health data from separate surveillance systems, including the Behavioral Risk Factor Surveillance System, the Pregnancy Risk Assessment Monitoring System, state oral health surveys, and other data sources. The enhanced annual State Dental Program Synopsis, which collects information on demographics, dental program activities, dental public health capacity, and funding, is also now available on the Internet. These data enable states and communities to track progress towards *Healthy People 2010* oral health objectives and to better target limited resources to those at highest risk for dental disease.

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